

Department of Planning, Building and Code Enforcement

BUILDING DIVISION DIRECTIVE E-001

Swimming Pools **Equipotential Bonding Grids**

Reference: CEC 680.26(C)

Date: April 21, 2008

Revised:

The 2007 California Electrical Code (CEC) Section 680.26(C) has added a new requirement for an Equipotential Bonding Grid under paved walking surfaces for 3 ft. horizontally beyond the inside walls of a pool. The Equipotential Bonding Grid is required under all paved walking surfaces around the pool and is not limited to poured concrete decks. This directive provides the minimum design and installation criteria to be used in the paved walking surfaces.

- A. The Equipotential Bonding Grid shall be permitted to be any of the following:
 - Structural reinforcing steel rods in the deck shall be minimum #3 rebar in an 18"X18" pattern at least 3ft. around the pool. The deck reinforcing steel rods shall be bonded to the pool reinforcing steel with at least one (1) #8 solid copper bonding jumper.
 - Wire mesh at least 3ft. wide around the perimeter of the pool. The wire mesh shall be in the deck and bonded to the pool reinforcing steel with a #8 solid copper conductor at a minimum of four (4) points uniformly spaced around the perimeter of the pool.
 - A #8 AWG bare solid copper conductor grid at least 3ft. wide around the perimeter of the pool, arranged in a 12"X12" pattern. The below –grade grid shall be secured within or under the deck media. The deck copper grid structure shall be bonded to the pool reinforcing steel with at least one #8 solid copper bonding jumper.
- B. The required bond tails from the paved deck area to the pool reinforcing steel will need to verified and approved by the field inspector at the Pre-Gunite inspection.
- C. Performance. The Equipotential bonding required by article 680 shall be installed to eliminate voltage gradients in the pool area.

Approved by

Edward Tolentino
Chief Building Office

Chief Building Official